18. The apparatus of claim 17, wherein the first path data comprises a mask that represents path of execution from the prefetch instruction to the instruction that uses the information prefetched by the prefetch instruction.

19. The apparatus of claim 18, further comprising branch prediction logic for generating predictions associated with branch instructions, and a branch history queue for accumulating the predictions generated by the branch prediction logic, wherein the second path data generated by the path prediction logic is based upon the predictions accumulated in the branch history queue.

20. The apparatus of claim 19, wherein the predictions are based upon previous execution of the instruction stream.

21. (Amended) The apparatus of claim12, wherein the prefetch instruction includes a field that identifies an instruction to prefetch from memory into the high speed buffer.

22. (Amended) The apparatus of claim 12, wherein the prefetch instruction includes a field that identifies data to prefetch from memory into the high speed buffer, wherein the data is operated on by at least one instruction in the instruction stream.

REMARKS/ARGUMENTS

Claims 1, 3-12 and 14-22 remain in the application. An appeal brief is being filed concurrently with this proposed amendment. Claims 21 and 22 are being amended to overcome an objection for duplication of claims. The dependency of the claims and the preambles are being corrected to avoid duplication of claims. Accordingly claims 21 and 22 have been amended to include reference to the apparatus of claim 12. This amendment should be entered because it is complying with a requirement of form expressly set forth in the final office action. See 37 C.F.R. §116(b). No fee is believed to be required because the amendment is being filed within the time for filing the appeal brief.

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Attached hereto is a marked-up version of the changes made to the specifications and claims by the current amendment. The attached page is captioned **"Version with markings to show changes made."**

Applicant respectfully requests that the proposed amendment be entered in the above-captioned application.

Respectfully submitted,

By: *Michael J. Buchenhorner*

Michael J. Buchenhorner

Registration No. 33,162

Telephone No.: (305) 789-7773

Facsimile. No.: (305) 679-6369

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the claims:

Claims 21 and 22 have been amended as follows:

21. (Amended) The [method] <u>apparatus</u> of claim [1] <u>12</u>, wherein the prefetch instruction includes a field that identifies an instruction to prefetch from memory into the high speed buffer.

22. (Amended) The [method] <u>apparatus</u> of claim [1] <u>12</u>, wherein the prefetch instruction includes a field that identifies data to prefetch from memory into the high speed buffer, wherein the data is operated on by at least one instruction in the instruction stream.

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